

CLAIMS

What is claimed is:

- 1 1. A wireless transceiver for providing high speed wireless media access,
2 comprising:
3 a local transceiver which is capable of transmitting data, via a transmit path while
4 receiving a feedback signal via a receive path;
5 a feedback generator connected to said local transceiver for generating and transmitting a
6 feedback signal in response to said wireless transceiver receiving data; and
7 a feedback detector connected to said local transceiver for detecting feedback signals.
8
9 2. The wireless transceiver of claim 1, wherein said wireless transceiver ceases
10 transmission of data upon detection of said feedback signal from a second wireless transceiver.
11
12 3. The wireless transceiver of claim 1, wherein said wireless transceiver is used
13 within a wireless system.
14
15 4. The wireless transceiver of claim 1, wherein said local transceiver further
16 comprises a circulator for minimizing attenuation of a received signal, and a radio frequency
17 echo canceler for minimizing self interference, wherein said local transceiver achieves isolation
18 between transmit and receive paths of said wireless transceiver.

1 5. The wireless transceiver of claim 1, wherein said data transmission is a wide band
2 data transmission and said feedback signal is a narrow-band feedback signal.

1 6. The wireless transceiver of claim 1, wherein said transmitting of said feedback
2 symbol is performed within a frequency null to provide isolation between said transmit path and
3 said receive path.

1 7. The wireless transceiver of claim 1, wherein said local transceiver performs
2 isolation between said transmit path and said receive path through use of a radio frequency echo
3 canceler located within said local transceiver.

1 8. The wireless transceiver of claim 1, wherein said feedback detector further
2 comprises an energy detector which is capable of detecting a specific amount of energy within a
3 feedback channel, that is representative of a feedback signal.

1 9. The wireless transceiver of claim 8, wherein detection of said specific amount of
2 energy results in said wireless transceiver ceasing transmission of data until said feedback signal
3 is de-asserted.

1 10. The wireless transceiver of claim 8, wherein said specific amount of energy is
2 derived from said feedback generator which is capable of injecting energy within a particular
3 frequency.

1 11. A wireless transceiver for providing high speed wireless media access,
2 comprising:
3 a means for transmitting data via a transmit path, while receiving a feedback signal via a
4 receive path;
5 a means for generating and transmitting a feedback signal in response to receiving data,
6 connected to said means for transmitting data; and
7 a means for detecting feedback signals, connected to said means for transmitting data.

1 12. The wireless transceiver of claim 11, wherein said wireless transceiver ceases
2 transmission of data upon detection of said feedback signal from a second means for transmitting
3 data.

1 13. The wireless transceiver of claim 11, wherein said wireless transceiver is used
2 within a wireless system.

1 14. The wireless transceiver of claim 11, wherein said means for transmitting data
2 further comprises a means for minimizing attenuation of a received signal, and a means for
3 minimizing self interference, wherein said means for transmitting data achieves isolation
4 between transmit and receive paths of said wireless transceiver.

1 15. The wireless transceiver of claim 11, wherein said data transmission is a wide
2 band data transmission and said feedback signal is a narrow-band feedback signal.

1 16. The wireless transceiver of claim 11, wherein said transmission of said feedback
2 symbol is performed within a frequency null to provide isolation between said transmit path and
3 said receive path.

1 17. The wireless transceiver of claim 11, wherein said means for transmitting data
2 performs isolation between said transmit path and said receive path through use of an isolation
3 means located within said means for transmitting data.

1 18. The wireless transceiver of claim 11, wherein said means for detecting feedback
2 signals further comprises a means of detecting a specific amount of energy within a feedback
3 channel, that is representative of a feedback signal.

1 19. The wireless transceiver of claim 18, wherein detection of said specific amount of
2 energy results in said wireless transceiver ceasing transmission of data until said feedback signal
3 is de-asserted.

1 20. The wireless transceiver of claim 18, wherein said specific amount of energy is
2 derived from said means for generating and transmitting a feedback signal, which is capable of
3 injecting energy within a particular frequency.

1 21. A method of providing high speed wireless media access between a series of
2 wireless transceivers, comprising the steps of:

3 testing for a specified amount of energy within a data channel of a first wireless
4 transceiver;

5 decoding data associated with said specified amount of energy in response to detecting
6 said specified amount of energy;

7 said series of wireless transceivers transmitting a feedback signal within said series of
8 wireless transceivers in order to stop the transmission of data within said series of wireless
9 transceivers until a destination of said data is determined;

10 identifying a destination address, associated with a destination wireless transceiver, for
11 said data from said decoded data; and

12 ceasing the transmission of said feedback signal by all wireless transceivers within said
13 series of wireless transceivers, except by said destination wireless transceiver.

1 22. The method of claim 21, wherein said steps of testing for said specified amount of
2 energy and identifying said destination address, are performed simultaneously.

1 23. The method of claim 21, wherein said method is provided within a wireless
2 communication system.